EM84/6FG6

ELECTRON-RAY TUBE

9-PIN MINIATURE INDICATOR TYPE WITH TRIODE UNIT

GENERAL DATA

Electrical:

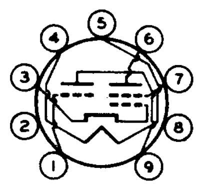
Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3	volts
Current	0.27	amp

Mechanical:

Operating Position	Any
Maximum Overall Length	2-27/32"
Maximum Seated Length	2-13/32"
Length, Base Seat to Bulb Top (Excluding tip)	2-7/32" ± 3/32"
Diameter	0.750" to 0.875"
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW	9GA

Pin 1 - Triode Grid
Pin 2 - Internal Connection— Do Not Use
Pin 3 - Cathode
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Fluorescent Target*
Pin 7 - Ray-Control Electrode
Pin 8 - Internal Connection— Do Not Use
Pin 9 - Triode Plate

* Fluorescent target is on inner surface of glass envelope above pin 7.

INDICATOR SERVICE

Maximum and Minimum Ratings, *Design-Center Values:*

RAY-CONTROL-ELECTRODE VOLTAGE:		
Without current flowing through series triode-plate resistor	550 max.	volts
With current flowing through series triode-plate resistor	300 max.	volts
FLUORESCENT-TARGET VOLTAGE:		
Without current flowing through series triode-plate resistor	550 max.	volts
With current flowing through series triode-plate resistor	300 max.	volts
	150 min.	volts
CATHODE CURRENT	3 max.	ma
TRIODE-PLATE DISSIPATION	0.5 max.	watt
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	100 max.	volts
Heater positive with respect to cathode	100 max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	120 max.	°C

Typical Operation:

With ray-control electrode connected to triode plate

Triode-Plate Supply Voltage	250	250	volts
Fluorescent-Target Voltage	250	250	volts

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

EM84

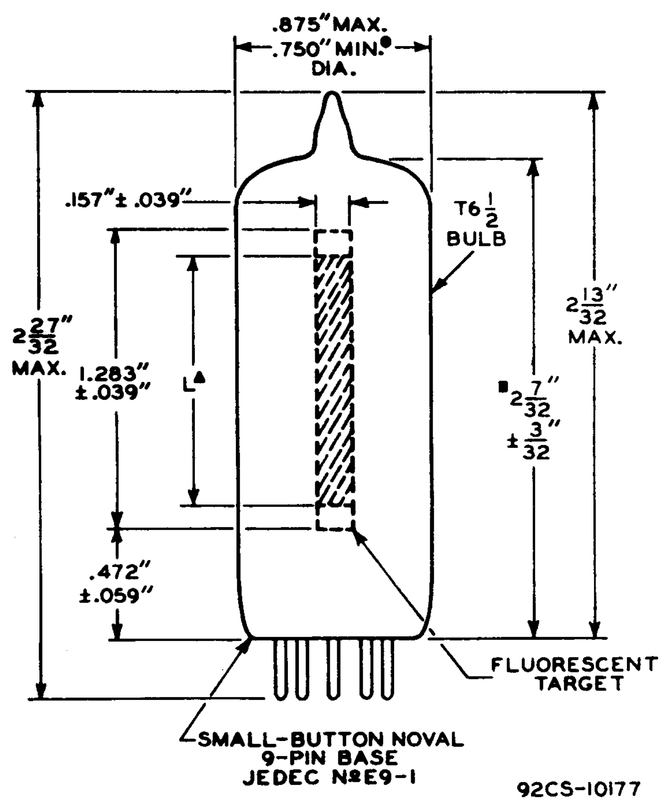
EM84/6FG6

ELECTRON-RAY TUBE

Series Triode–Plate Resistor . . .	0.47	0.47	megohm
Triode–Grid–Supply Voltage	0	-22	volts
Triode–Grid Resistor	3	3	megohms
Triode–Plate Current	0.45	0.06	ma
Fluorescent–Target Current	1.1	1.6	ma
Length of Dark Part of Fluorescent Target (Dimension "L" on *Dimensional Outline*)	0.83 ± 0.20	0	inch
Length of Dark Part of Fluorescent Target when triode–grid resistor = 0	0.94 ± 0.20	-	inch

Maximum Circuit Values:

Triode–Grid–Circuit Resistance	3 max.	megohms



● APPLIES IN ZONE STARTING 0.375" FROM BASE SEAT.

■ MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY RING GAUGE OF 7/16" INSIDE DIAMETER.

▲ "L" = LENGTH OF DARK PART OF FLUORESCENT TARGET.

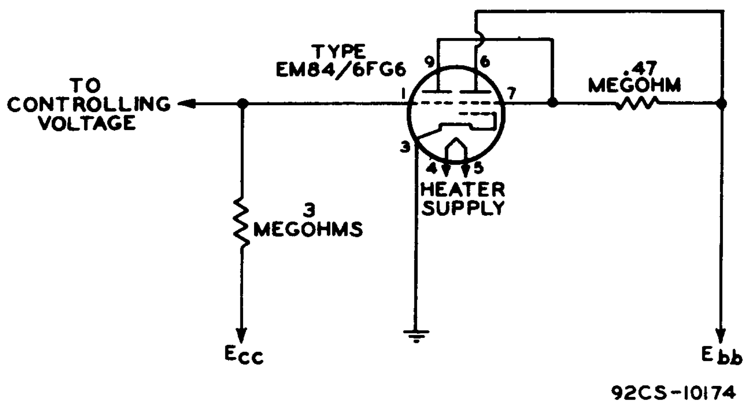
Obsolete 10/64

EM84

EM84/6FG6

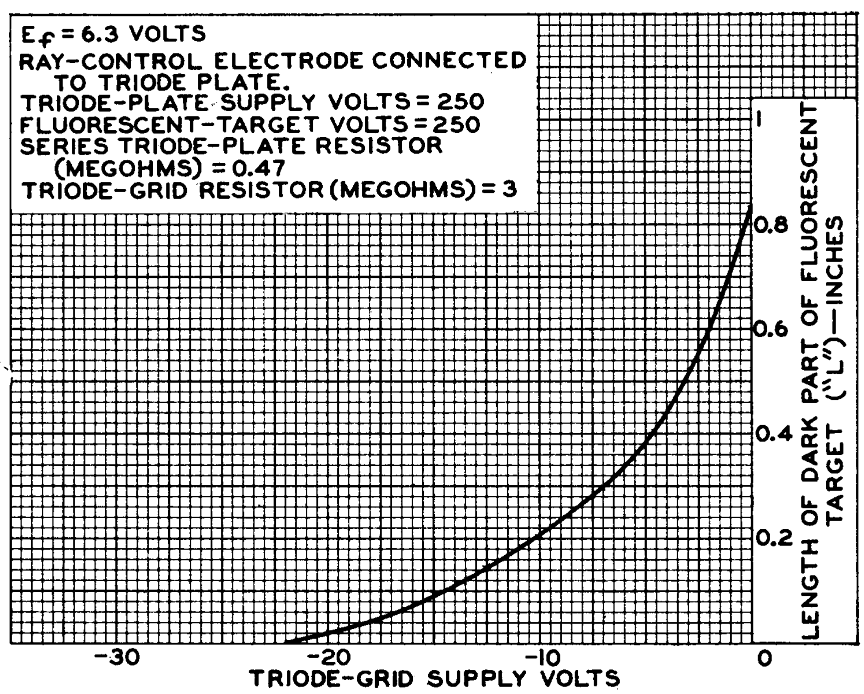
ELECTRON-RAY TUBE

TYPICAL CIRCUIT



8-59 CE-10174

TYPICAL OPERATION CHARACTERISTIC



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CS-10179